

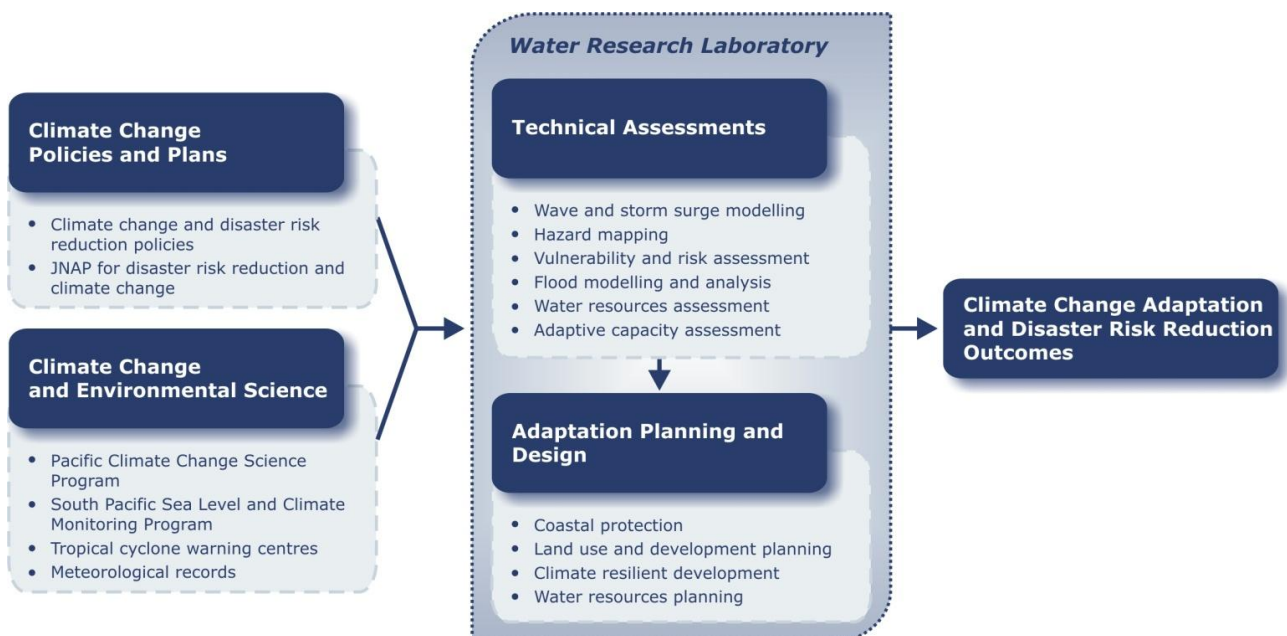
The Water Research Laboratory is a unique organisation that has provided expertise and solutions related to water engineering and the environment since 1958. In recent times WRL have used this vast experience for developing focussed and practical advice related to Disaster Risk Management and the emerging impacts of climate change. In particular, WRL staff are focussed on assisting government groups to achieve policy and planning goals through development and implementation of on-ground adaptation strategies. WRL's team has the expertise to interpret and utilise complex scientific information to develop evidence based approaches to adaptation and Disaster Risk Management.

WRL's Business Areas Include:

- Coastal Engineering
- Rainfall and Water Resources
- Wetlands and Salt Marsh
- Groundwater



WRL aims to provide technically robust solutions that are based on localised and site specific situations. In contrast to large consultancies, WRL achieves this by having a small team of highly trained and practical engineers that work in the field, in the office and in the laboratory. WRL staff are hands on and work in the real-world, which allows them to work effectively to provide practical solutions in challenging environments.



WRL is a unique organisation that has a dedicated team of engineers and scientists undertaking applied commercial projects, yet also has the benefits of close ties to the research undertaken by the wider University. This allows WRL to work with the latest methods and knowledge, but still work to the timeframes and standards expected by industry.



Technical Assessments

- Modelling of coastal processes including:
 - Waves
 - Storm surge
 - Runup
- Mapping of coastal hazard areas
- Vulnerability and risk assessments
- Coastal protection and coastal structure design
- Coastal protection condition assessment
- Rainfall and water harvesting
- Flooding and inundation
- Groundwater modelling
- Groundwater sampling including:
 - Water quality
 - Aquifer yield

Field Assessments

- Specialist surveying equipment including:
 - RTK-GPS surveying of topography and shallow water bathymetry
 - Kayak/boat towable DGPS echosounder for lagoons, intertidal mud flats, rivers and estuaries
- Ocean, lagoon and river currents with ADCP
- Wave and tide data collection
- Environmental camera monitoring systems
- Groundwater sampling

Capacity Building

- Custom training courses for:
 - Coastal engineering and coastal management
 - Wetlands
 - Groundwater processes and sampling
- Development of custom assessment tools



Water Research Laboratory

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